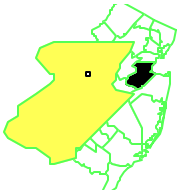
CHEMICAL INSECTICIDE CORPORATION

NEW JERSEY

EPA ID# NJD980484653



EPA REGION 2

CONGRESSIONAL DIST. 6

Middlesex County

Edison Township

Site Description

The Chemical Insecticide Corporation (CIC) Site is located in Edison Township. CIC owned the property located at 30 Whitman Avenue from 1954 to 1970 and used it for processing various pesticides. In the mid-1960s, the Edison Department of Health became concerned about odors, wastewater discharges and on-site fires. The Department ordered the facility to stop discharging wastewater, oversaw disposal of leaking drums to eliminate an odor problem, and ordered the closing of on-site lagoons. CIC declared bankruptcy in 1970. Subsequently, Piscataway Associates bought the 6-acre CIC property and demolished the production facilities. As part of a State-wide dioxin screening program, the New Jersey Department of Environmental Protection sampled soil from the site and found contamination, triggering more detailed investigations by EPA. Approximately 77,000 people live within 3 miles of the site. There are no permanent surface water bodies on the CIC site. Surface water run-off drains toward the northeast corner of the site where it discharges into an underground conduit, which flows into an unnamed tributary of Mill Brook. The unnamed tributary and Mill Brook run near the site and have been used for recreation. The residents near these tributaries and the residents directly surrounding the site obtain potable water from a public water supply system located eight miles from the site. Groundwater underlying the site is considered by New Jersey to be a Class II-A, a source of potable water. No current exposures to contaminated groundwater are known. The nearest domestic potable water well used for drinking water is up-gradient to the southwest and approximately two miles from the site.

Site Responsibility: This site is being addressed through Federal and State actions.

NPL LISTING HISTORY

Proposed Date: 10/26/89

Final Date: 08/30/90

Threats and Contaminants

The soil at the site is contaminated with arsenic, organic pesticides (e.g., DDT, chlordane), herbicides (dinoseb) and other hazardous substances. Site access is controlled by a fence and direct contact with the contaminated soil has been minimized with the installation of an interim cap over a large portion of the site, however contaminants can migrate from the site by groundwater migration. Prior to construction of the interim cap and a surface water run-off diversion system to collect uncontaminated surface water run-off from the cap, contaminated surface water runoff from the site was found to contain arsenic and the herbicide dinoseb. This runoff used to enter an unnamed tributary of Mill Brook. The groundwater at the site is contaminated by arsenic, organic pesticides and other hazardous substances. The site does not pose a threat to any existing potable water source since the limited mobility of the contaminated groundwater at the site minimizes the potential for off-site migration.

Cleanup Approach

EPA has divided the response actions for the site into several remedial phases or Operable Units (OUs) as follows:

Interim Remedy (OU1): this remedial phase addressed the contaminated surface water runoff conditions at the CIC site (completed in 1995).

Final Soil Remedy (OU2): this remedial phase is on-going and is currently addressing contaminated soil on the CIC property and on neighboring industrial areas. EPA issued a Record of Decision for OU2 on September 29, 2000. The selected remedy calls for the excavation and off-site disposal of an estimated 140,000 cubic yards of contaminated soil. Soil excavation commenced in July 2003.

Final Off-Site Remedy (OU3): this remedial phase addressed the remediation of contaminated soil and sediment in off-site areas associated with the CIC site (completed in 1997).

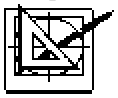
Final Groundwater Remedy (OU4): this remedial phase will address groundwater contamination associated with the CIC site. The cleanup strategy for a groundwater remedy was proposed in July 2003 and a ROD specifying the selected remedy was issued on December 22, 2003.

Response Action Status

Contaminated Surface Water Runoff (OU1): This interim remedial action included (1) grading the site; (2) installing an impermeable cap over the site; (3) installation of a system to control the release of uncontaminated runoff; and (4) installation of a fence along the entire site perimeter. This action was completed in September 1994.

Contaminated Off-Site Soil and Sediment (OU3): A Record of Decision to address contaminated off-site soil and sediment was issued on March 28, 1995. Work, which

started in July 1995, included excavation and off-site disposal of 13,800 cubic yards of arsenic-contaminated soil and sediment followed by full restoration of off-site areas, stream beds, and wetlands. Work was completed in April 1997.



Site Soils and Source Materials (OU2): A Record of Decision was issued on September 29, 2000, to address the contaminated soils and source materials by excavation and off-site disposal. Soil excavation commenced in July 2003 and is expected to be completed in 2005.

Groundwater (OU4): A Remedial Investigation and Feasibility Study to evaluate current groundwater site conditions and develop appropriate cleanup alternatives was completed in 2003. EPA issued a Record of Decision on December 22, 2003 which specified institutional controls and long-term groundwater monitoring to address the groundwater.

Cleanup Progress (Threat Mitigated by Physical Action)

Completion of the above-described interim remedial action for OU1 included the installation of a high density polyethylene surficial cap, construction of a surface water run-off diversion system to collect uncontaminated surface water run-off from the cap and channeling it to a drainage system, and the installation of a security fence around the CIC site. These measures have reduced the threat to the surrounding community and the environment by controlling the off-site migration of contamination by surface water run-off and preventing access and direct contact exposure to contaminated soil on-site.

Implementation of the remedy to address contaminated off-site soil and sediment (OU3), which included the excavation and off-site disposal of 13,800 cubic yards (20,000 tons) of contaminated soil and sediment found in and around Mill Brook has been completed. Restoration of this remediated area included extensive reconstruction of stream beds and stream banks. The restoration involved replacing subsoil and rip-rap for stabilization of stream banks, topsoil, and the planting of over 3,000 wetland and upland trees and shrubs. Post-remediation monitoring has shown that the cleanup goals were achieved and the disturbed creek areas have been restored.

The cleanup is on-going for on-site soils and source materials (OU2) which entails the excavation and off-site disposal of approximately 140,000 cubic yards of contaminated material. Once the OU2 excavation is completed, the direct contact pathway for human exposure will be prevented and the soil excavation will have removed the source of the groundwater contamination.

The selected remedy specified for the groundwater (OU4) in the December 2003 Record of Decision will entail institutional controls to be put in place to prevent any new production wells from being installed in the area of the groundwater contamination, and a groundwater sampling program will be instituted to monitor the groundwater contamination, evaluate the migration of the plume over time, and make sure the community is protected from exposure.